EMERSON
Network Power

DSView™ 4 Management Software

Transition Technical Bulletin

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DSView™ 3 to DSView™ 4 Data Transition

Introduction

The DSView™ 4 management software transition guide enables you to migrate data configured in DSView™ 3 management software to DSView 4 software. In this document, DSView 3 software refers to DSView 3 software versions 3.7.2 or 3.7.3. If your DSView 3 software version is lower than 3.7.2.0, then you will need to upgrade to version 3.7.2.x before you begin.

NOTE: When migrating from DSView 3 software to DSView 4 software, DSView 4 must be installed on a separate server or DSView 3 must be backed up and uninstalled prior to installing DSView 4. DSView 4 cannot be installed on the same server as DSView 3 as an upgrade.

NOTE: If you plan to concurrently deploy DSView 4 software with your current DSView 3 software, see *Transitioning from DSView 3 software to DSView 4 software* on page 1.

In order to proceed with following this guide, you must have Linux® or Windows® server administration skills and have a good understanding of the DSView software.

Transitioning from DSView 3 software to DSView 4 software

Running DSView 3 software alongside DSView 4 software is possible but once the DSView 3 data has migrated into DSView 4, there will be no synchronization and any management changes that are made in one system will have to be manually duplicated in the other. It is important to note that appliances send status updates to DSView software via SNMP traps. Appliances are pre-populated with the SNMP trap destination IP of the DSView 3 software server to which the appliance was added. If the DSView 4 software server has a different IP than the DSView 3 software server, then the each DSView 4 software hub/spoke IP address will need to be added as additional SNMP trap destinations for all appliances in order to ensure that DSView 4 software receives status changes in the fastest possible manner.

DSView 3 software and DSView 4 software servers that are utilizing the same license key will conflict with each other if they are on the same IP subnet. If the DSView 3 software server and DSView 4 software server are going to be both active for a period of time, they must be in

different subnets or they must have operating system firewall rules blocking traffic to and from each other's IP. Without satisfying this prerequisite, the DSView 4 software servers will detect a license usage violation and one or both systems will become disabled. If this occurs, turn off one of the two systems or block IP traffic between then and then restart the DSView 4 software service.

Prerequisites

The following are the minimum requirements for installing DSView 4 software on a dedicated hub or spoke server:

Operating Systems:

- Microsoft® Windows Server 2003 (x64), 2003 R2 (x64), 2008 (x64), 2008 R2 (x64)
- SuSe® Linux Enterprise Server 10 (x64), 11(x64)
- RedHat® Enterprise Server 4 (x64), 5.4 (x64)
- Sun™ Solaris SPARC® 9, 10

The table below lists the hardware requirements based on the number of target devices.

Table 1.1: Hardware Requirements

Large (>7000 Target Devices)	Medium (1000-7000 Target Devices)	Small (<1000 Target Devices)
Windows/Linux Dedicated Physical Server • One or more 2+ Ghz Multi-Core CPU • 6+ GB RAM • 80+ GB HDD	Windows/Linux Dedicated Physical Server • 2+ Ghz CPU • 4+ GB RAM • 40+ GB HDD	Windows/Linux Dedicated Physical Server or (ESX/Hyper-V) Virtual Machine (no resource sharing) • Dedicated processing priority 2+Ghz • Dedicated 6 GB RAM • 40GB non-expanding HDD
Sun Server • 1 Ghz UltraSparc III • 4+ GB RAM • 40+ GB HDD	Sun Server • 1 Ghz UltraSparc III • 4+ GB RAM • 40+ GB HDD	Sun Server • 1 Ghz UltraSparc III • 4 GB RAM • 40 GB HDD

Large (>7000 Target Devices)	Medium (1000-7000 Target Devices)	Small (<1000 Target Devices)
1gbps/10gbps LAN Local or remote database	10mbps/100mbps/1gbps(recommended) LAN Local or remote database	10mbps/100mbps LAN Local database

Transition Process

NOTE: In order to safely upgrade to the DSView 4 software, and to provide a roll-back path in case of upgrade failures, perform each of the following steps. If your DSView 3 configuration does not include spoke servers, skip the steps that refer to spoke servers.

Before you begin, ensure that you budget sufficient time to transition the hub and spoke servers concurrently. The typical timeframe for transition is between 10 minutes and a couple of hours. However, the amount of time required will vary depending on the amount of data and the database size.

Transition Process:

1. Backup the DSView 3 hub server.
2. Backup DSView spoke servers (if you have spoke servers).
3. Install the DSView 4 software
   a. New server installation

   -or-

   b. Installation on previous DSView 3 server. This scenario requires uninstalling DSView 3 software before DSView 4 software installation.
4. Using the export mode in the migration utility, create the database migration file.
5. Using the import mode in the migration utility, deploy the DSView 3 backup file, data and migration file contents into the DSView software.

Data Replication

Perform a replication of all DSView 3 software spoke servers. In order to ensure that the entire system has fully replicated, run the replication task twice to ensure that all spokes are in sync with the hub server.

To initiate an immediate replication on a spoke server:

1. On the spoke server, click the *System* tab.

2. Click *Tasks* in the top navigation bar. The Tasks window will open.
3. Check the checkbox to the left of the Database Replication task and then click *Run Now*.

Back up the DSView 3 Software

Manually create a backup of your hub and each spoke server. The backup includes the database, plug-ins, firmware, appliance templates and system properties. Two methods are available:

- From a command line in an MS-DOS window. This method may be used for DSView 3 software hub servers on supported Windows® systems.
- Use the Backup and Restore system task located in the DSView 3 software WebUI. The backup is saved as a .zip file containing the files needed to restore the DSView 3 management software. This method may be used for DSView 3 software hub servers on supported Windows systems only.

NOTE: Client sessions will be temporarily disconnected during a manual backup. The sessions will be automatically reconnected when the backup is completed.

Manual backup and restore procedures require DSView 3 software administrator privileges.

Command line backup on a Linux or Solaris system:

1. Access the command prompt on your system.
2. Change directories to the directory where the DSView 3 software is installed, which is typically /usr/local/dsviewserver/bin.
3. To back up the DSView 3 software hub server, enter **DSViewBackupRestore.sh -backup -archive <archive name> -passwd <password> -overwrite**.

For example, entering the following in a command prompt window will create a backup named dbasebackup.zip.

```
DSViewBackupRestore.sh backup -archive dbasebackup.zip
```

Backup on a Windows system:

1. In the Start menu on your desktop, select *Start - Programs - Avocent DSView 3- Backup and Restore Utility*. The DSView 3 Backup/Restore Utility dialog box will appear.
2. Click *Backup Database to a file*.
3. To password-protect the backup file, click *Enabled* and type a password in the Password field.

4. Click *Browse* and use the Save As dialog box to specify a directory and name for the backup file. Click *Save* when you are finished.
5. Click *Backup*. The DSView 3software system backup files are saved.
6. Click *Close* to close the DSView 3 Backup/Restore Utility dialog box.

Back up the Power Manager plug-in Database

NOTE: The following steps are required if using the power manager capabilities within the DSView software. These steps begin the process of migrating power manager data into the separate Rack Power Manager product. For more information on the migration process for power manager, see the Rack Power Manager Installer/User Guide.

This task creates a .zip file containing a backup of the Power Manager database. The backup file is named dsviewPluginBackup.zip by default, but you may also append the date and time to the end of the backup filename.

To configure the PMP backup:

1. Click the *System* tab.
2. Click *Tasks* in the top navigation bar. The Tasks window will open.
3. Click *Add*. The Add Task Wizard will appear.
4. Select *Backup Power Manager database* from the drop-down menu. Type a 1-64 character name for the task.
5. Select a time to run the task, then click *Next*.
6. The Specify Power Manager Database Backup Properties window will open.
    a. Type the directory location in which to create the backup file, which may be a physical local drive on the DSView 3 server or a shared network location specified by a UNC (Universal Naming Convention) path. The Location field cannot be set to a mapped network drive. The directory name must be entered in case sensitive text if your operating system supports case sensitive filenames.
    b. If the specified directory location is a network path that requires a login, enable the *Login required to access shared drive location* checkbox. Then type the username and password and confirm the password of a user account that has read/write access to the network share location.
    c. To append the date and time (in military time) to the end of the system backup filename, enable the *Use date and time for file naming* checkbox. For example, if you are creating the backup file on October 1, 2011 at 10:04 pm, the file created will be named dsviewBackup1001112204.zip.

If a backup file already exists in the specified directory and the *Use date and time for file naming* option is not enabled, the existing backup file will be overwritten when the new backup file is created.

7. Click *Finish*.

Install DSView 4 Software

NOTE: If the DSView 4 software will be installed on the same server that DSView 3 software was previously installed on, make sure that you back up the DSView 3 server and then uninstall the DSView 3 software.

To Install the DSView 4 Software:

1. Download the latest version of the DSView 4 software to the server.
2. Run the installation file and follow the on screen instructions.
3. On the PostgreSQL Installation screen, check the box to Use Existing Database if connecting to an existing database and click *Next*.

   -or-

   Click *Next* to install a new instance.
4. For an existing PostgreSQL server, enter the IP address, port, username and password, and click *Next*.

   -or-

   For a new instance, enter the install folder, port, and password and click *Next*. Click *Install* on the confirmation screen.
5. Click *Ok* on the Service Startup message, then click *Done*.

Data Migration Utility

NOTE: Java Runtime Environment is required to run the migration utility.

Exporting the Data

The data migration utility was installed with the DSView 4 software. It will allow you to migrate existing DSView 3 software database data, appliance templates, and system properties to the new database structure. The utility will also export the Power Manager Plug-in (PMP) database data, if required.

NOTE: If using Windows Server 2008 or Server 2008R2, you must have administrative privileges to run the migration utility.

To export the data:

1. Launch the migration utility
   a. From a Windows server, click *Start - All Programs - Emerson DSView 4 - Data Migration Utility*.
2. From the command line, enter ***./DataMig.sh***
3. Select the server type
   a. On the Export tab in Windows, select the Server Type from the drop-down menu.
   b. From the command line, choose option number two.
4. Choosing *Hub* will export the DSView 3 software database or the PMP database.
5. Choosing *Spoke* will export the PMP database.

NOTE: The DSView 3 software database can only be exported from the Hub server.

6. Select either DSView or PMP for the Database Type.
7. In the field Data Backup File Path, enter the path or browse to the location of the database file. This is the file that was created during the backup.
   a. If DSView was selected for the database type, then you will need the path to the DSView 3 software backup file.
   b. If PMP was selected for the database type, then you will need the path to the PMP backup file.
8. In the Migration File Path field, enter or browse to the location that you will save the exported file.
9. In Windows, click *Export*. From the command line, enter **y** to continue with the export.

Importing the Data

The data migration utility takes the backup file and migrates the plug-ins, appliance templates and system properties and converts them into PostgreSQL format.

NOTE: In case of import failure, all data in the DSView 4 software hub will be rolled back.

To import the data:

1. Launch the migration utility
   a. From the Windows server, click *Start - All Programs - Avocent DSView 4 - Data Migration Utility* and then click the *Import Tab*.

b. From the command line, enter **./DataMig.sh** and choose option number one to import the data.

2. For the Target DataBase IP, enter the server IP address of the DSView 4 software hub server. This can be either the local server IP address or a remote IP address. For remote installations, where the PostgreSQL database was installed previously on a separate server, the hba_conf file on the remote PostgreSQL server must be edited to allow a remote IP connection by the DSView 4 migration utility.
3. Enter the listening port for your hub server in the Target Database Port field.
4. Enter the database username in the Target Database Username field.
5. Enter the password for the database in the Target Database Password field.
6. In the Migration File Path field, enter or browse to the location that you saved the DSView 3 software export file.
7. In the field Data Backup File Path, enter the path or browse to the location of the DSView 3 software database file.
8. In the DSView 4 Home Path field, input the home path for the DSView 4 software hub server.
9. On the Windows server, click *Import*. From the command line, enter **y** to continue with the import.
10. Restart the PostgreSQL and DSView services.

NOTE: After the migration is complete, the DSView software will continue running background data propagation processes. During this time you may not be able to log into the DSView software or some unit names/types may not display properly. The DSView software migration will overwrite all of the DSView 4 database content with the migrated DSView 3 data. The account created during the DSView 4 software install will be overwritten with accounts from the DSView 3 software migration.

Install and Configure the Hub

After the DSView 3 software data has been migrated to the DSView 4 software server, you are now ready to configure the DSView 4 software hub server.

To configure the hub server:

1. Restart the Postgres service and start the DSView 4 service. Wait approximately 10-15 minutes before proceeding to allow data migration services to complete.

2. Accept the SSL security warning (This warning occurs since the DSView software uses a self-generated and self-signed SSL certificate. Consult the DSView Installer/User Guide for the steps to replace this self-signed certificate with one provided by your corporate CA.).
3. From the DSView 4 software server, go to *Start - All Programs - Emerson - DSView 4 Software* or from a remote system, browse to https://IPAddress of DSView 4 Server/dsview.
4. Click *Continue to this website*.
5. Enter the administrator username and password, and click *Next*.
6. On the configuration wizard, select the Hub role if the imported database came from a DSView 3 Hub server or select Spoke if the imported database came from a DSView 3 Spoke server, click *Next*.
7. Click *Finish* to complete the installation.

Install and Configure Spoke Servers

The following steps should be completed for each spoke server.

To install and configure a spoke server:

1. From the DSView 4 software server, go to *Start - All Programs - Emerson - DSView 4 Software* or from a remote system, browse to https://IPAddress of DSView 4 Server/dsview.
2. Click *Continue to this website*.
3. In the configuration wizard, select the Spoke role.
4. Enter the DSView 4 hub server address and port.
5. Enter the administrator username and password and click *Next*.
6. Click *Finish* to complete the installation.
7. Stop the DSView services and copy the backup files from the DSView 3 spoke backup over the corresponding folders of the DSView 4 spoke server.
8. Start DSView service on the spoke server.

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